

adopted in the Report and Order would be to hold only the licensee responsible for compliance with the Commission's rules and policies. This approach would affect the burdens and responsibilities applicable to licensees that choose to enter into spectrum leasing, many of whom may be small entities. We reject this approach because we believe that our decision here will help prevent the undermining of our service rules and policies unless and until we explicitly decide to change such rules and policies. In fact, small (and large) entities, as well as the public, will benefit from licensees and lessees adhering to, for example, our interference and RF radiation rules.

55. Licensee reliance on spectrum lessee activities to meet construction or performance obligations. See Report and Order, paras. 114-115, 147, 177. We decided in the Report and Order that licensees that engage in spectrum leasing arrangements remain responsible for complying with the construction or performance obligations associated with the license. The Report and Order determines that licensees that participate in spectrum manager leasing arrangements and long-term *de facto* transfer spectrum leasing arrangements can rely upon the activities of their spectrum lessees in satisfying their construction and/or performance obligations. We anticipate no adverse impact on small entities as a result of this decision, since our approach in fact offers additional flexibility for licensees and should encourage parties to enter into leasing agreements without added concern that the arrangement will impede licensee compliance with our construction and performance rules. The Report and Order also determined that licensees that participate in short-term *de facto* transfer spectrum leasing arrangements would not be able to rely upon the activities of the short-term lessee to satisfy the construction and/or performance obligations. Since short-term *de facto* transfer spectrum leasing arrangements are intended to be of limited duration, we believe that this step is necessary to ensure that licensees do not seek to evade enforcement of our construction and/or performance obligations. This action poses no greater burden on small entities but treats all licensees that seek to enter into spectrum leasing arrangements on a comparable basis.

56. Applicability of designated entity eligibility and unjust enrichment policies. See Report and Order, paras. 113, 145, 176. In the Report and Order, we continue to apply the existing designated entity and entrepreneur policies to both spectrum manager leasing arrangements and long-term *de facto* transfer leasing arrangements. Under the spectrum manager leasing policies, we allow designated entity and entrepreneur licensees to enter into leasing arrangements with spectrum lessees without triggering application of the Commission's unjust enrichment rules and/or transfer restrictions so long as the lease does not allow the lessee to become a "controlling interest" or "affiliate" of the licensee (as defined under existing Commission rules) such that the licensee would lose its designated entity or entrepreneur status. For long-term *de facto* transfer spectrum leasing, we allow licensees that have received designated entity benefits or hold a license as an entrepreneur to enter into long-term *de facto* transfer spectrum leasing arrangements with other entities, subject to provisions on transfer restrictions and unjust enrichment that apply to transfers or assignments of such licenses.¹²⁵ We decide, however, not to subject short-term *de facto* transfer spectrum leasing arrangements to the designated entity eligibility and unjust enrichment policies, in order to promote the availability of spectrum pursuant to spectrum leasing arrangements to meet short-term needs. We believe that providing this flexibility for leasing arrangements that are of short duration will not undermine enforcement of our general rules and policies. In each of these types of leasing arrangements, small entities will be affected by these policies, but will be treated comparably to larger entities that may be affected as licensees, spectrum lessees, or potential spectrum lessees.

57. Our decision in this area necessarily balances competing statutory obligations, competing public interest considerations, and the competing viewpoints expressed in comments filed with the Commission in this docket. We believe, however, that our decision about how to address these issues in the context of the three categories of spectrum leasing arrangements discussed in the Report and Order

¹²⁵ See 47 C.F.R. §§ 1.2111, 24.709.

strikes an appropriate balance of these many competing considerations that serves the public interest in facilitating secondary market transactions while also upholding the integrity of our rules promoting opportunities designated entities and entrepreneurs. The Commission already provides significant benefits to small businesses that have become licensees pursuant to our designated entity and entrepreneur policies. In the Report and Order, we allow these licensees to enter into spectrum manager and long-term *de facto* transfer leasing arrangements so long as doing so does not undermine those policies. As for short-term *de facto* transfer arrangements, we also do not apply these policies because we conclude that the opportunities for licensees and lessees to undermine our policies are slim in the context of arrangements of very limited duration, and because we seek to provide special flexibility in our rules when allowing parties to address short-term spectrum needs.

58. Accordingly, we decide that licensees that enter into spectrum manager and long-term *de facto* transfer leasing arrangements may confront limitations on their ability to enter into arrangements with interested parties to the extent that a particular license is still covered by any designated entity rules and policies restricting eligibility under the license. Under spectrum manager leasing arrangements, designated entity and entrepreneur licensees may enter into leasing arrangements insofar as such arrangements would not cause them to lose their designated entity or entrepreneur status under the Commission's applicable rules. For long-term *de facto* transfer arrangements, licensees must reimburse the government for unjust enrichment for leasing spectrum to a lessee in the same manner as it would have been required to pay had the licensee instead transferred it to that entity.¹²⁶ Further, in accordance with the Commission's rules and any applicable notes and security agreements, we will continue to hold a licensee participating in the Commission's installment payment program solely responsible for the debt obligation to the government. We believe that holding otherwise would allow entities to circumvent the rules concerning designated entities and would undermine the Commission's policies underlying those rules. The designated entity rules implement an explicit Congressional mandate to the Commission to allocate licenses so as to promote "economic opportunity and competition," and to "ensur[e] that new and innovative technologies are readily accessible to the American people by avoiding excessive concentration of licenses and by disseminating licenses among a wider variety of applicants, including small businesses."¹²⁷ If we did not require designated entities to abide by any applicable designated entity eligibility and unjust enrichment rules and policies when leasing to non-designated entities, parties could easily undermine rules fulfilling our Congressional mandate to set aside spectrum for the sole use of designated entities.

59. Spectrum manager subleasing. See Report and Order, para. 106. We anticipate no adverse impact on small entities from our decision to allow spectrum manager lessees to sublease their spectrum usage rights under certain conditions. In fact, subleasing would likely benefit small (and large) entities by offering additional flexibility to obtain spectrum that fits an entity's particular business needs.

60. Spectrum manager leasing arrangements – notification to the Commission. See Report and Order, paras. 123-124. The Report and Order requires licensees that enter into a spectrum manager leasing arrangement to provide notification of the lease arrangement to the Commission. We anticipate no adverse economic impact on small entities as a result of requiring this notification filing. The required notification required is not onerous, and will provide the Commission, other spectrum licensees (including small entities), other spectrum lessees (including small entities), potential spectrum lessees (including small entities), and the public with essential information about spectrum usage. It will also help to ensure licensee and lessee compliance with our interference, service, and other rules and policies.

¹²⁶ See 47 C.F.R. §§ 1.2111(b)-(e) (unjust enrichment relating to set-asides, installment financing, bidding credits, and partitioning or disaggregation).

¹²⁷ 47 U.S.C. § 309(j)(3)(B).

61. De facto transfer leasing arrangements – streamlined approval procedures. See Report and Order, paras. 133, 150-154, 163-165. The Report and Order adopts a streamlined prior approval process for parties entering into *de facto* transfer leasing arrangements pursuant to streamlined approval procedures. These streamlined procedures, designed to facilitate spectrum leasing to the greatest extent possible and consistent with the public interest, apply equally to small and large entities, and amount to a reduction in applicable regulatory requirements. We anticipate no adverse impact on small entities as a result of this action. In fact, our adoption of this second spectrum leasing option and related streamlined processing requirements should further enhance the development of more robust secondary markets in spectrum usage rights resulting in increased benefits to small (and large) entities seeking greater flexibility and increased access to spectrum. We believe that small entities that might not be able to afford to acquire spectrum at auction will be able to reduce their spectrum acquisition costs and access a particular amount of spectrum that meets their individual business needs.

62. In addition, the information collected under this streamlined approach is similar to what is currently required under our transfer and assignment rules and should facilitate spectrum leasing by reducing transaction costs, uncertainty, and delay. While an alternative would be to require no approval, we believe that this would run counter to our statutory responsibilities under Section 310(d) of the Communications Act.¹²⁸

63. De facto transfer subleasing. See Report and Order, paras. 139-140. We anticipate no adverse impact to small entities from our decision to allow *de facto* transfer lessees to sublease their spectrum usage rights under certain conditions. Consistent with our rationale concerning spectrum manager subleasing, we believe that subleasing under *de facto* transfer leasing arrangements would likely benefit small (and large) entities by offering additional flexibility to obtain spectrum that fits an entity's particular business needs.

64. Short-term de facto transfer leasing arrangements. See Report and Order, paras. 175-180. In the Report and Order, we extend many of the policies applicable to long-term *de facto* transfer leasing arrangements to short-term *de facto* transfer leasing arrangements, except that we ease certain restrictions on lessees that enter into short-term *de facto* transfer leasing arrangements. We anticipate no adverse impact on small entities from this action. Due to the fact that these short-term leases are intended to address temporary spectrum needs, we believe that it is appropriate to permit additional flexibility for such arrangements. Thus, for example, we will allow licensees with authorizations that limit use to non-commercial purposes to enter into lease agreements that allow the lessee to use the spectrum commercially. Similarly, we will not subject licensees entering into short-term leases to designated entity unjust enrichment provisions or to entrepreneur transfer restrictions that would be applicable if a designated entity or entrepreneur licensee were to enter into a long-term lease arrangement or transfer or assign its license. Our approach here should benefit small (and large) entities by facilitating the use of short-term leases that meet temporary spectrum needs while maintaining the integrity of other Commission policies.

65. Streamlined processing for transfer of control and license assignment applications. See Report and Order, paras. 196-198. In addition to establishing spectrum leasing policies, the Report and Order also extends the same type of streamlined approval procedures applicable to long-term *de facto* transfer leasing arrangements to our review and approval procedures for license assignments and transfers of control in those services affected by our spectrum leasing policies. We anticipate no adverse impact on small entities as a result of this action. In fact, more timely processing of transfer of control and license assignment applications should benefit small (and large) entities in the same manner as contemplated by

¹²⁸ 47 U.S.C. § 310(d).

our streamlined approval procedures for long-term *de facto* transfer leasing, should promote the efficient operation in the marketplace of both small and large entities, and should benefit the public.

Report to Congress: The Commission will send a copy of the Report and Order, including this FRFA, in a report to be sent to Congress pursuant to the Congressional Review Act.¹²⁹ In addition, the Commission will send a copy of the Report and Order, including this FRFA, to the Chief Counsel for Advocacy of the Small Business Administration. A copy of the Report and Order and FRFA (or summaries thereof) will also be published in the Federal Register.¹³⁰

IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Report and Order, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

¹²⁹ See 5 U.S.C. § 801(a)(1)(A).

¹³⁰ See 5 U.S.C. § 604(b).

APPENDIX D

INITIAL REGULATORY FLEXIBILITY ANALYSIS

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),¹ the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the policies and rules proposed in this Further Notice of Proposed Rulemaking (Further Notice). Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Further Notice provided in paragraph 325 of the item. The Commission will send a copy of the Further Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).² In addition, the Further Notice and IRFA (or summaries thereof) will be published in the Federal Register.³

A. Need for, and Objectives of, the Proposed Rules

2. While the changes we adopt today in the Report and Order are an important step towards facilitating leasing of spectrum usage rights and enhancing the functioning of the secondary spectrum marketplace generally, we believe that there are additional measures that we might take to improve efficiency and promote access to a secondary spectrum market in order to ensure the greatest benefit to spectrum users and consumers. Thus, in the Further Notice, we seek comment on: (1) how to encourage the development of information and clearinghouse mechanisms to facilitate secondary market transactions between licensees and new users in need of access to spectrum; (2) further streamlining of application processing for spectrum leasing, transfers of control, and license assignments; (3) expanding our spectrum leasing policies to additional services not encompassed within the Report and Order; (4) applying the new *de facto* control standard adopted for spectrum leasing to other issues and types of arrangements; and, (5) evaluating whether the spectrum leasing policies adopted in the Report and Order for designated entities should be altered in any respect. We discuss the potential impact of these on small entities in the paragraphs that follow.

B. Legal Basis

3. The potential actions on which comment is sought in this Further Notice would be authorized under Sections 1, 4(i), and 303(r), of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), and 303(r).

C. Description and Estimate of the Number of Small Entities to Which the Proposed Rules Will Apply

4. The RFA requires that an initial regulatory flexibility analysis be prepared for notice-and-comment rulemaking proceedings, unless the Agency certifies that "the rule will not, if promulgated, have a significant impact on a substantial number of small entities."⁴ The RFA generally defines the term

¹ See 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

² See 5 U.S.C. § 603(a).

³ See *id.*

⁴ 5 U.S.C. § 603(b)(3).

"small entity" as having the same meaning as the terms "small business," "small organization," and "small governmental jurisdiction."⁵ In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.⁶ A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the Small Business Administration (SBA).⁷ A small organization is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."⁸ This IRFA describes and estimates the number of small entity licensees that may be affected if the proposals in this Further Notice are adopted.

5. This Further Notice could result in rule changes that, if adopted, would create new opportunities and obligations for Wireless Radio Services licensees and other entities that may lease spectrum usage rights from these licensees. When identifying small entities that could be affected by our new rules, we provide information describing auctions results, including the number of small entities that are winning bidders. We note, however, that the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily reflect the total number of small entities currently in a particular service. The Commission does not generally require that applicants provide business size information, except in the context of an assignment or transfer of control application where unjust enrichment issues are implicated. Consequently, to assist the Commission in analyzing the total number of potentially affected small entities, we request commenters to estimate the number of small entities that may be affected by any rule changes resulting from this Further Notice.

Wireless Radio Services

6. Many of the potential rules on which comment is sought in this Further Notice, if adopted, would affect small entity licensees of the Wireless Radio Services identified below.

7. **Cellular Licensees.** The SBA has developed a small business size standard for small businesses in the category "Cellular and Other Wireless Telecommunications."⁹ Under that SBA category, a business is small if it has 1,500 or fewer employees.¹⁰ According to the Bureau of the Census, only twelve firms out of a total of 977 cellular and other wireless telecommunications firms that operated for the entire year in 1997 had 1,000 or more employees.¹¹ Therefore, even if all twelve of these firms were cellular telephone companies, nearly all cellular carriers are small businesses under the SBA's definition.

⁵ *Id.* at § 601(6).

⁶ 5 U.S.C. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to the RFA, the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

⁷ Small Business Act, 15 U.S.C. § 632 (1996).

⁸ 5 U.S.C. § 601(4).

⁹ 13 C.F.R. § 121.201, North American Industry Classification System (NAICS) code 517212.

¹⁰ *Id.*

¹¹ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 513322 (October 2000).

8. **220 MHz Radio Service – Phase I Licensees.** The 220 MHz service has both Phase I and Phase II licenses. Phase I licensing was conducted by lotteries in 1992 and 1993. There are approximately 1,515 such non-nationwide licensees and four nationwide licensees currently authorized to operate in the 220 MHz band. The Commission has not developed a definition of small entities specifically applicable to such incumbent 220 MHz Phase I licensees. To estimate the number of such licensees that are small businesses, we apply the small business size standard under the SBA rules applicable to “Cellular and Other Wireless Telecommunications” companies. This category provides that a small business is a wireless company employing no more than 1,500 persons.¹² According to the Census Bureau data for 1997, only twelve firms out of a total of 977 such firms that operated for the entire year in 1997, had 1,000 or more employees.¹³ If this general ratio continues in the context of Phase I 220 MHz licensees, the Commission estimates that nearly all such licensees are small businesses under the SBA’s small business standard.

9. **220 MHz Radio Service – Phase II Licensees.** The 220 MHz service has both Phase I and Phase II licenses. The Phase II 220 MHz service is subject to spectrum auctions. In the *220 MHz Third Report and Order*, we adopted a small business size standard for defining “small” and “very small” businesses for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.¹⁴ This small business standard indicates that a “small business” is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.¹⁵ A “very small business” is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that do not exceed \$3 million for the preceding three years.¹⁶ The SBA has approved these small size standards.¹⁷ Auctions of Phase II licenses commenced on September 15, 1998, and closed on October 22, 1998.¹⁸ In the first auction, 908 licenses were auctioned in three different-sized geographic areas: three nationwide licenses, 30 Regional Economic Area Group (EAG) Licenses, and 875 Economic Area (EA) Licenses. Of the 908 licenses auctioned, 693 were sold.¹⁹ Thirty-nine small businesses won 373 licenses in the first 220 MHz auction. A second auction included 225 licenses: 216 EA licenses and 9 EAG licenses. Fourteen companies claiming small business status won 158 licenses.²⁰ A third auction included four licenses: 2 BEA licenses

¹² 13 C.F.R. § 121.201, NAICS code 517212.

¹³ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 5, NAICS code 513322 (October 2000).

¹⁴ Amendment of Part 90 of the Commission’s Rules to Provide For the Use of the 220-222 MHz Band by the Private Land Mobile Radio Service, *Third Report and Order*, 12 FCC Rcd 10943, 11068-70 ¶¶ 291-295 (1997).

¹⁵ *Id.* at 11068 ¶ 291.

¹⁶ *Id.*

¹⁷ See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

¹⁸ See generally “220 MHz Service Auction Closes,” *Public Notice*, 14 FCC Rcd 605 (WTB 1998).

¹⁹ See “FCC Announces It is Prepared to Grant 654 Phase II 220 MHz Licenses After Final Payment is Made,” *Public Notice*, 14 FCC Rcd 1085 (WTB 1999).

²⁰ See “Phase II 220 MHz Service Spectrum Auction Closes,” *Public Notice*, 14 FCC Rcd 11218 (WTB 1999).

and 2 EAG licenses in the 220 MHz Service. No small or very small business won any of these licenses.²¹

10. **Lower 700 MHz Band Licenses.** We adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding credits.²² We have defined a small business as an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years.²³ A very small business is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years.²⁴ Additionally, the lower 700 MHz Service has a third category of small business status that may be claimed for Metropolitan/Rural Service Area (MSA/RSA) licenses. The third category is entrepreneur, which is defined as an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$3 million for the preceding three years.²⁵ The SBA has approved these small size standards.²⁶ An auction of 740 licenses (one license in each of the 734 MSAs/RSAs and one license in each of the six Economic Area Groupings (EAGs)) commenced on August 27, 2002, and closed on September 18, 2002. Of the 740 licenses available for auction, 484 licenses were sold to 102 winning bidders. Seventy-two of the winning bidders claimed small business, very small business or entrepreneur status and won a total of 329 licenses.²⁷ A second auction commenced on May 28, 2003, and closed on June 13, 2003, and included 256 licenses: 5 EAG licenses and 476 CMA licenses.²⁸ Seventeen winning bidders claimed small or very small business status and won sixty licenses, and nine winning bidders claimed entrepreneur status and won 154 licenses.²⁹

11. **Upper 700 MHz Band Licenses.** The Commission released a *Report and Order*, authorizing service in the upper 700 MHz band.³⁰ This auction, previously scheduled for January 13, 2003, has been postponed.³¹

²¹ See "Multi-Radio Service Auction Closes," *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

²² See Reallocation and Service Rules for the 698-746 MHz Spectrum Band (Television Channels 52-59), *Report and Order*, 17 FCC Rcd 1022 (2002).

²³ *Id.* at 1087-88 ¶ 172.

²⁴ *Id.*

²⁵ *Id.* at 1088 ¶ 173.

²⁶ See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999.

²⁷ See "Lower 700 MHz Band Auction Closes," *Public Notice*, 17 FCC Rcd 17272 (WTB 2002).

²⁸ See "Lower 700 MHz Band Auction Closes," *Public Notice*, 18 FCC Rcd 11873 (WTB 2003).

²⁹ *Id.*

³⁰ Service Rules for the 746-764 and 776-794 MHz Bands, and Revisions to Part 27 of the Commission's Rules, *Second Memorandum Opinion and Order*, 16 FCC Rcd 1239 (2001).

³¹ See "Auction of Licenses for 747-762 and 777-792 MHz Bands (Auction No. 31) Is Rescheduled," *Public Notice*, 16 FCC Rcd 13079 (WTB 2003).

12. **Paging.** In the *Paging Second Report and Order*, we adopted a size standard for “small businesses” for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.³² A small business is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$15 million for the preceding three years.³³ The SBA has approved this definition.³⁴ An auction of Metropolitan Economic Area (MEA) licenses commenced on February 24, 2000, and closed on March 2, 2000. Of the 2,499 licenses auctioned, 985 were sold.³⁵ Fifty-seven companies claiming small business status won 440 licenses.³⁶ An auction of Metropolitan Economic Area (MEA) and Economic Area (EA) licenses commenced on October 30, 2001, and closed on December 5, 2001. Of the 15,514 licenses auctioned, 5,323 were sold.³⁷ 132 companies claiming small business status purchased 3,724 licenses. A third auction, consisting of 8,874 licenses in each of 175 EAs and 1,328 licenses in all but three of the 51 MEAs commenced on May 13, 2003, and closed on May 28, 2003. Seventy-seven bidders claiming small or very small business status won 2,093 licenses.³⁸ Currently, there are approximately 24,000 Private Paging site-specific licenses and 74,000 Common Carrier Paging licenses. According to the most recent *Trends in Telephone Service*, 608 private and common carriers reported that they were engaged in the provision of either paging or “other mobile” services.³⁹ Of these, we estimate that 589 are small, under the SBA-approved small business size standard.⁴⁰ We estimate that the majority of private and common carrier paging providers would qualify as small entities under the SBA definition.

13. **Broadband Personal Communications Service (PCS).** The broadband PCS spectrum is divided into six frequency blocks designated A through F, and the Commission has held auctions for each block. The Commission has created a small business size standard for Blocks C and F as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.⁴¹ For Block F,

³² Revision of Part 22 and Part 90 of the Commission’s Rules to Facilitate Future Development of Paging Systems, *Second Report and Order*, 12 FCC Rcd 2732, 2811-2812 ¶¶ 178-181 (*Paging Second Report and Order*); see also Revision of Part 22 and Part 90 of the Commission’s Rules to Facilitate Future Development of Paging Systems, *Memorandum Opinion and Order on Reconsideration*, 14 FCC Rcd 10030, 10085-10088 ¶¶ 98-107 (1999).

³³ *Paging Second Report and Order*, 12 FCC Rcd at 2811 ¶ 179.

³⁴ See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

³⁵ See “929 and 931 MHz Paging Auction Closes,” *Public Notice*, 15 FCC Rcd 4858 (WTB 2000).

³⁶ See *id.*

³⁷ See “Lower and Upper Paging Band Auction Closes,” *Public Notice*, 16 FCC Rcd 21821 (WTB 2002).

³⁸ See “Lower and Upper Paging Bands Auction Closes,” *Public Notice*, 18 FCC Rcd 11154 (WTB 2003).

³⁹ See *Trends in Telephone Service*, Industry Analysis Division, Wireline Competition Bureau, Table 5.3 (Number of Telecommunications Service Providers that are Small Businesses) (May 2002).

⁴⁰ 13 C.F.R. § 121.201, NAICS code 517211.

⁴¹ See Amendment of Parts 20 and 24 of the Commission’s Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7850-7852 ¶¶ 57-60 (1996); see also 47 C.F.R. § 24.720(b).

an additional small business size standard for "very small business" was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.⁴² These small business size standards, in the context of broadband PCS auctions, have been approved by the SBA.⁴³ No small businesses within the SBA-approved small business size standards bid successfully for licenses in Blocks A and B. There were 90 winning bidders that qualified as small entities in the Block C auctions. A total of 93 "small" and "very small" business bidders won approximately 40 percent of the 1,479 licenses for Blocks D, E, and F.⁴⁴ On March 23, 1999, the Commission reaucted 155 C, D, E, and F Block licenses; there were 113 small business winning bidders.⁴⁵

14. **Narrowband PCS.** The Commission held an auction for Narrowband PCS licenses that commenced on July 25, 1994, and closed on July 29, 1994. A second commenced on October 26, 1994 and closed on November 8, 1994. For purposes of the first two Narrowband PCS auctions, "small businesses" were entities with average gross revenues for the prior three calendar years of \$40 million or less.⁴⁶ Through these auctions, the Commission awarded a total of forty-one licenses, 11 of which were obtained by four small businesses.⁴⁷ To ensure meaningful participation by small business entities in future auctions, the Commission adopted a two-tiered small business size standard in the *Narrowband PCS Second Report and Order*.⁴⁸ A "small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$40 million.⁴⁹ A "very small business" is an entity that, together with affiliates and controlling interests, has average gross revenues for the three preceding years of not more than \$15 million.⁵⁰ The SBA has

⁴² See Amendment of Parts 20 and 24 of the Commission's Rules – Broadband PCS Competitive Bidding and the Commercial Mobile Radio Service Spectrum Cap, *Report and Order*, 11 FCC Rcd 7824, 7852 ¶ 60.

⁴³ See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

⁴⁴ FCC News, "Broadband PCS, D, E and F Block Auction Closes," No. 71744 (rel. January 14, 1997).

⁴⁵ See "C, D, E, and F Block Broadband PCS Auction Closes," *Public Notice*, 14 FCC Rcd 6688 (WTB 1999).

⁴⁶ Implementation of Section 309(j) of the Communications Act – Competitive Bidding Narrowband PCS, *Third Memorandum Opinion and Order and Further Notice of Proposed Rulemaking*, 10 FCC Rcd 175, 196 ¶ 46 (1994).

⁴⁷ See "Announcing the High Bidders in the Auction of ten Nationwide Narrowband PCS Licenses, Winning Bids Total \$617,006,674," *Public Notice*, PNWL 94-004 (rel. Aug. 2, 1994); "Announcing the High Bidders in the Auction of 30 Regional Narrowband PCS Licenses; Winning Bids Total \$490,901,787," *Public Notice*, PNWL 94-27 (rel. Nov. 9, 1994).

⁴⁸ Amendment of the Commission's Rules to Establish New Personal Communications Services, Narrowband PCS, *Second Report and Order and Second Further Notice of Proposed Rule Making*, 15 FCC Rcd 10456, 10476 ¶ 40 (2000).

⁴⁹ *Id.*

⁵⁰ *Id.*

approved these small business size standards.⁵¹ A third auction commenced on October 3, 2001 and closed on October 16, 2001. Here, five bidders won 317 (MTA and nationwide) licenses.⁵² Three of these claimed status as a small or very small entity and won 311 licenses.

15. **Specialized Mobile Radio (SMR).** The Commission awards "small entity" bidding credits in auctions for Specialized Mobile Radio (SMR) geographic area licenses in the 800 MHz and 900 MHz bands to firms that had revenues of no more than \$15 million in each of the three previous calendar years.⁵³ The Commission awards "very small entity" bidding credits to firms that had revenues of no more than \$3 million in each of the three previous calendar years.⁵⁴ The SBA has approved these small business size standards for the 900 MHz Service.⁵⁵ The Commission has held auctions for geographic area licenses in the 800 MHz and 900 MHz bands. The 900 MHz SMR auction began on December 5, 1995, and closed on April 15, 1996. Sixty bidders claiming that they qualified as small businesses under the \$15 million size standard won 263 geographic area licenses in the 900 MHz SMR band. The 800 MHz SMR auction for the upper 200 channels began on October 28, 1997, and was completed on December 8, 1997. Ten bidders claiming that they qualified as small businesses under the \$15 million size standard won 38 geographic area licenses for the upper 200 channels in the 800 MHz SMR band.⁵⁶ A second auction for the 800 MHz band was held on January 10, 2002 and closed on January 17, 2002 and included 23 BEA licenses. One bidder claiming small business status won five licenses.⁵⁷

16. The auction of the 1,050 800 MHz SMR geographic area licenses for the General Category channels began on August 16, 2000, and was completed on September 1, 2000. Eleven bidders won 108 geographic area licenses for the General Category channels in the 800 MHz SMR band qualified as small businesses under the \$15 million size standard. In an auction completed on December 5, 2000, a total of 2,800 Economic Area licenses in the lower 80 channels of the 800 MHz SMR service were sold. Of the 22 winning bidders, 19 claimed "small business" status and won 129 licenses. Thus, combining all three auctions, 40 winning bidders for geographic licenses in the 800 MHz SMR band claimed status as small business.

17. In addition, there are numerous incumbent site-by-site SMR licensees and licensees with extended implementation authorizations in the 800 and 900 MHz bands. We do not know how many firms provide 800 MHz or 900 MHz geographic area SMR pursuant to extended implementation

⁵¹ See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

⁵² See "Narrowband PCS Auction Closes," *Public Notice*, 16 FCC Rcd 18663 (WTB 2001).

⁵³ 47 C.F.R. § 90.814(b)(1).

⁵⁴ *Id.*

⁵⁵ See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated August 10, 1999. We note that, although a request was also sent to the SBA requesting approval for the small business size standard for 800 MHz, approval is still pending.

⁵⁶ See "Correction to Public Notice DA 96-586 'FCC Announces Winning Bidders in the Auction of 1020 Licenses to Provide 900 MHz SMR in Major Trading Areas,'" *Public Notice*, 18 FCC Rcd 18367 (WTB 1996).

⁵⁷ See "Multi-Radio Service Auction Closes," *Public Notice*, 17 FCC Rcd 1446 (WTB 2002).

authorizations, nor how many of these providers have annual revenues of no more than \$15 million. One firm has over \$15 million in revenues. We assume, for purposes of this analysis, that all of the remaining existing extended implementation authorizations are held by small entities, as that small business size standard is established by the SBA.

18. **Private Land Mobile Radio (PLMR).** PLMR systems serve an essential role in a range of industrial, business, land transportation, and public safety activities. These radios are used by companies of all sizes operating in all U.S. business categories, and are often used in support of the licensee's primary (non-telecommunications) business operations. For the purpose of determining whether a licensee of a PLMR system is a small business as defined by the SBA, we could use the definition for "Cellular and Other Wireless Telecommunications." This definition provides that a small entity is any such entity employing no more than 1,500 persons.⁵⁸ The Commission does not require PLMR licensees to disclose information about number of employees, so the Commission does not have information that could be used to determine how many PLMR licensees constitute small entities under this definition. Moreover, because PLMR licensees generally are not in the business of providing cellular or other wireless telecommunications services but instead use the licensed facilities in support of other business activities, we are not certain that the Cellular and Other Wireless Telecommunications category is appropriate for determining how many PLMR licensees are small entities for this analysis. Rather, it may be more appropriate to assess PLMR licensees under the standards applied to the particular industry subsector to which the licensee belongs.⁵⁹

19. The Commission's 1994 Annual Report on PLMRs⁶⁰ indicates that at the end of fiscal year 1994, there were 1,087,267 licensees operating 12,481,989 transmitters in the PLMR bands below 512 MHz. Because any entity engaged in a commercial activity is eligible to hold a PLMR license, the revised rules in this context could potentially impact every small business in the United States.

20. **Fixed Microwave Services.** Fixed microwave services include common carrier,⁶¹ private-operational fixed,⁶² and broadcast auxiliary radio services.⁶³ Currently, there are approximately 22,015 common carrier fixed licensees and 61,670 private operational-fixed licensees and broadcast auxiliary radio licensees in the microwave services. The Commission has not yet defined a small business with respect to microwave services. For purposes of this FRFA, we will use the SBA's definition applicable to "Cellular and Other Wireless Telecommunications" companies—that is, an entity with no more than

⁵⁸ See 13 C.F.R. § 121.201, NAICS code 517212.

⁵⁹ See generally 13 C.F.R. § 121.201.

⁶⁰ Federal Communications Commission, 60th Annual Report, Fiscal Year 1994, at ¶ 116.

⁶¹ 47 C.F.R. §§ 101 *et seq.* (formerly, part 21 of the Commission's Rules).

⁶² Persons eligible under parts 80 and 90 of the Commission's rules can use Private Operational-Fixed Microwave services. See generally 47 C.F.R. parts 80 and 90. Stations in this service are called operational-fixed to distinguish them from common carrier and public fixed stations. Only the licensee may use the operational-fixed station, and only for communications related to the licensee's commercial, industrial, or safety operations.

⁶³ Auxiliary Microwave Service is governed by part 74 of Title 47 of the Commission's Rules. See 47 C.F.R. Part 74. Available to licensees of broadcast stations and to broadcast and cable network entities, broadcast auxiliary microwave stations are used for relaying broadcast television signals from the studio to the transmitter, or between two points such as a main studio and an auxiliary studio. The service also includes mobile TV pickups, which relay signals from a remote location back to the studio.

1,500 persons.⁶⁴ The Commission does not have data specifying the number of these licensees that have more than 1,500 employees, and thus is unable at this time to estimate with greater precision the number of fixed microwave service licensees that would qualify as small business concerns under the SBA's small business size standard. Consequently, the Commission estimates that there are 22,015 or fewer small common carrier fixed licensees and 61,670 or fewer small private operational-fixed licensees and small broadcast auxiliary radio licensees in the microwave services that may be affected by the rules and policies adopted herein. The Commission notes, however, that the common carrier microwave fixed licensee category includes some large entities.

21. **Wireless Communications Services.** This service can be used for fixed, mobile, radiolocation, and digital audio broadcasting satellite uses. The Commission defined "small business" for the wireless communications services (WCS) auction as an entity with average gross revenues of \$40 million for each of the three preceding years, and a "very small business" as an entity with average gross revenues of \$15 million for each of the three preceding years.⁶⁵ The SBA has approved these definitions.⁶⁶ The FCC auctioned geographic area licenses in the WCS service. In the auction, which commenced on April 15, 1997 and closed on April 25, 1997, there were seven bidders that won 31 licenses that qualified as very small business entities, and one bidder that won one license that qualified as a small business entity. An auction for one license in the 1670-1674 MHz band commenced on April 30, 2003 and closed the same day. One license was awarded. The winning bidder was not a small entity.

22. **39 GHz Service.** The Commission defines "small entity" for 39 GHz licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.⁶⁷ "Very small business" is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.⁶⁸ The SBA has approved these definitions.⁶⁹ The auction of the 2,173 39 GHz licenses began on April 12, 2000, and closed on May 8, 2000. The 18 bidders who claimed small business status won 849 licenses.

23. **Local Multipoint Distribution Service.** An auction of the 986 Local Multipoint Distribution Service (LMDS) licenses began on February 18, 1998, and closed on March 25, 1998. The Commission defined "small entity" for LMDS licenses as an entity that has average gross revenues of less than \$40 million in the three previous calendar years.⁷⁰ An additional classification for "very small

⁶⁴ 13 C.F.R. § 121.201, NAICS code 517212.

⁶⁵ Amendment of the Commission's Rules to Establish Part 27, the Wireless Communications Service (WCS), *Report and Order*, 12 FCC Rcd 10785, 10879 ¶ 194 (1997).

⁶⁶ See Letter to Amy Zoslov, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated December 2, 1998.

⁶⁷ See Amendment of the Commission's Rules Regarding the 37.0-38.6 GHz and 38.6-40.0 GHz Band, *Report and Order*, 12 FCC Rcd 18600 (1997).

⁶⁸ *Id.*

⁶⁹ See Letter to Margaret Wiener, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Hector Barreto, Administrator, Small Business Administration, dated January 18, 2002.

⁷⁰ See Rulemaking to Amend Parts 1, 2, 21, 25, of the Commission's Rules to Redesignate the 27.5-29.5 GHz Frequency Band, Reallocate the 29.5-30.5 Frequency Band, to Establish Rules and Policies for Local (continued....)

business” was added and is defined as an entity that, together with its affiliates, has average gross revenues of not more than \$15 million for the preceding three calendar years.⁷¹ These regulations defining “small entity” in the context of LMDS auctions have been approved by the SBA.⁷² There were 93 winning bidders that qualified as small entities in the LMDS auctions. A total of 93 small and very small business bidders won approximately 277 A Block licenses and 387 B Block licenses. On March 27, 1999, the Commission re-auctioned 161 licenses; there were 32 small and very small business winning bidders that won 119 licenses.

24. **218-219 MHz Service.** The first auction of 218-219 MHz (previously referred to as the Interactive and Video Data Service or IVDS) spectrum resulted in 178 entities winning licenses for 594 Metropolitan Statistical Areas (MSAs).⁷³ Of the 594 licenses, 567 were won by 167 entities qualifying as a small business. For that auction, we defined a small business as an entity that, together with its affiliates, has no more than a \$6 million net worth and, after federal income taxes (excluding any carry over losses), has no more than \$2 million in annual profits each year for the previous two years.⁷⁴ In the *218-219 MHz Report and Order and Memorandum Opinion and Order*, we defined a small business as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and their affiliates, has average annual gross revenues not exceeding \$15 million for the preceding three years.⁷⁵ A very small business is defined as an entity that, together with its affiliates and persons or entities that hold interests in such an entity and its affiliates, has average annual gross revenues not exceeding \$3 million for the preceding three years.⁷⁶ The SBA has approved of these definitions.⁷⁷ At this time, we cannot estimate the number of licenses that will be won by entities qualifying as small or very small businesses under our rules in future auctions of 218-219 MHz spectrum. Given the success of small businesses in the previous auction, and the prevalence of small businesses in the subscription television services and message communications industries, we assume for purposes of this FRFA that in future auctions, many, and perhaps all, of the licenses may be awarded to small businesses.

25. **Location and Monitoring Service (LMS).** Multilateration LMS systems use non-voice radio techniques to determine the location and status of mobile radio units. For purposes of auctioning

Multipoint Distribution Service and for Fixed Satellite Services, *Second Report and Order, Order on Reconsideration, and Fifth Notice of Proposed Rule Making*, 12 FCC Rcd 12545, 12689-90 ¶ 348 (1997).

⁷¹ *Id.*

⁷² See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

⁷³ See “Interactive Video and Data Service (IVDS) Applications Accepted for Filing,” *Public Notice*, 9 FCC Rcd 6227 (1994).

⁷⁴ Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Fourth Report and Order*, 9 FCC Rcd 2330 (1994).

⁷⁵ Amendment of Part 95 of the Commission’s Rules to Provide Regulatory Flexibility in the 218-219 MHz Service, *Report and Order and Memorandum Opinion and Order*, 15 FCC Rcd 1497 (1999).

⁷⁶ *Id.*

⁷⁷ See Letter to Daniel Phythyon, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated January 6, 1998.

LMS licenses, the Commission has defined “small business” as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$15 million.⁷⁸ A “very small business” is defined as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not exceeding \$3 million.⁷⁹ These definitions have been approved by the SBA.⁸⁰ An auction for LMS licenses commenced on February 23, 1999, and closed on March 5, 1999. Of the 528 licenses auctioned, 289 licenses were sold to four small businesses. We cannot accurately predict the number of remaining licenses that could be awarded to small entities in future LMS auctions.

26. Rural Radiotelephone Service. We use the SBA definition applicable to cellular and other wireless telecommunication companies, *i.e.*, an entity employing no more than 1,500 persons.⁸¹ There are approximately 1,000 licensees in the Rural Radiotelephone Service, and the Commission estimates that there are 1,000 or fewer small entity licensees in the Rural Radiotelephone Service that may be affected by the rules and policies adopted herein.

27. Air-Ground Radiotelephone Service. We use the SBA definition applicable to cellular and other wireless telecommunication companies, *i.e.*, an entity employing no more than 1,500 persons.⁸² There are approximately 100 licensees in the Air-Ground Radiotelephone Service, and the Commission estimates that almost all of them qualify as small entities under the SBA definition.

28. Offshore Radiotelephone Service. This service operates on several ultra high frequency (UHF) TV broadcast channels that are not used for TV broadcasting in the coastal area of the states bordering the Gulf of Mexico. At present, there are approximately 55 licensees in this service. We use the SBA definition applicable to cellular and other wireless telecommunication companies, *i.e.*, an entity employing no more than 1,500 persons.⁸³ The Commission is unable at this time to estimate the number of licensees that would qualify as small entities under the SBA definition. The Commission assumes, for purposes of this FRFA, that all of the 55 licensees are small entities, as that term is defined by the SBA.

29. Multiple Address Systems (MAS). Entities using MAS spectrum, in general, fall into two categories: (1) those using the spectrum for profit-based uses, and (2) those using the spectrum for private internal uses. With respect to the first category, the Commission defines “small entity” for MAS licenses as an entity that has average gross revenues of less than \$15 million in the three previous calendar years.⁸⁴ “Very small business” is defined as an entity that, together with its affiliates, has

⁷⁸ Amendment of Part 90 of the Commission’s Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, *Second Report and Order*, 13 FCC Rcd 15182, 15192 ¶ 20 (1998); *see also* 47 C.F.R. § 90.1103.

⁷⁹ Amendment of Part 90 of the Commission’s Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, *Second Report and Order*, 13 FCC Rcd at 15192 ¶ 20; *see also* 47 C.F.R. § 90.1103.

⁸⁰ *See* Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated February 22, 1999.

⁸¹ 13 C.F.R. § 121.201, NAICS code 517212.

⁸² *Id.*

⁸³ *Id.*

⁸⁴ *See* Amendment of the Commission’s Rules Regarding Multiple Address Systems, *Report and Order*, 15 FCC Rcd 11956, 12008 ¶ 123 (2000).

average gross revenues of not more than \$3 million for the preceding three calendar years.⁸⁵ The SBA has approved of these definitions.⁸⁶ The majority of these entities will most likely be licensed in bands where the Commission has implemented a geographic area licensing approach that would require the use of competitive bidding procedures to resolve mutually exclusive applications. The Commission's licensing database indicates that, as of January 20, 1999, there were a total of 8,670 MAS station authorizations. Of these, 260 authorizations were associated with common carrier service. In addition, an auction for 5,104 MAS licenses in 176 EAs began November 14, 2001, and closed on November 27, 2001.⁸⁷ Seven winning bidders claimed status as small or very small businesses and won 611 licenses.

30. With respect to the second category, which consists of entities that use, or seek to use, MAS spectrum to accommodate their own internal communications needs, we note that MAS serves an essential role in a range of industrial, safety, business, and land transportation activities. MAS radios are used by companies of all sizes, operating in virtually all U.S. business categories, and by all types of public safety entities. For the majority of private internal users, the definitions developed by the SBA would be more appropriate. The applicable definition of small entity in this instance appears to be the "Cellular and Other Wireless Telecommunications" definition under the SBA rules. This definition provides that a small entity is any entity employing no more than 1,500 persons.⁸⁸ The Commission's licensing database indicates that, as of January 20, 1999, of the 8,670 total MAS station authorizations, 8,410 authorizations were for private radio service, and of these, 1,433 were for private land mobile radio service.

31. **Incumbent 24 GHz Licensees.** The rules that we adopt could affect incumbent licensees who were relocated to the 24 GHz band from the 18 GHz band, and applicants who wish to provide services in the 24 GHz band. The Commission did not develop a definition of small entities applicable to existing licensees in the 24 GHz band. Therefore, the applicable definition of small entity is the definition under the SBA rules for "Cellular and Other Wireless Telecommunications." This definition provides that a small entity is any entity employing no more than 1,500 persons.⁸⁹ We believe that there are only two licensees in the 24 GHz band that were relocated from the 18 GHz band, Teligent⁹⁰ and TRW, Inc. It is our understanding that Teligent and its related companies have less than 1,500

⁸⁵ *Id.*

⁸⁶ See Letter to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, Federal Communications Commission, from Aida Alvarez, Administrator, Small Business Administration, dated June 4, 1999.

⁸⁷ See "Multiple Address Systems Spectrum Auction Closes," *Public Notice*, 16 FCC Rcd 21011 (2001).

⁸⁸ See 13 C.F.R. § 121.201, NAICS code 517212.

⁸⁹ See *id.* According to Census Bureau data for 1997, in this category, there were a total of 977 firms that operated for the entire year. U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 5, NAICS code 513322 (October 2000). Of this total, 965 firms had employment of 999 or fewer employees, and an additional 12 firms had employment of 1,000 employees or more. *Id.* The census data do not provide a more precise estimate of the number of firms that have 1,500 or fewer employees; the largest category provided is "Firms with 1,000 employees or more."

⁹⁰ Teligent acquired the Digital Electronic Message Service (DEMS) licenses of FirstMark, the only licensee other than TRW in the 24 GHz band whose license has been modified to require relocation to the 24 GHz band.

employees, though this may change in the future. TRW is not a small entity. Thus, only one incumbent licensee in the 24 GHz band is a small business entity.

32. **Future 24 GHz Licensees.** With respect to new applicants in the 24 GHz band, we have defined "small business" as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the three preceding years not exceeding \$15 million.⁹¹ "Very small business" in the 24 GHz band is defined as an entity that, together with controlling interests and affiliates, has average gross revenues not exceeding \$3 million for the preceding three years.⁹² The SBA has approved these definitions.⁹³ The Commission will not know how many licensees will be small or very small businesses until the auction, if required, is held.

33. **700 MHz Guard Band Licenses.** In the *700 MHz Guard Band Order*, we adopted size standards for "small businesses" and "very small businesses" for purposes of determining their eligibility for special provisions such as bidding credits and installment payments.⁹⁴ A small business in this service is an entity that, together with its affiliates and controlling principals, has average gross revenues not exceeding \$40 million for the preceding three years.⁹⁵ Additionally, a "very small business" is an entity that, together with its affiliates and controlling principals, has average gross revenues that are not more than \$15 million for the preceding three years.⁹⁶ SBA approval of these definitions is not required.⁹⁷ An auction of 52 Major Economic Area (MEA) licenses commenced on September 6, 2000, and closed on September 21, 2000.⁹⁸ Of the 104 licenses auctioned, 96 licenses were sold to nine bidders. Five of these bidders were small businesses that won a total of 26 licenses. A second auction of 700 MHz Guard Band licenses commenced on February 13, 2001, and closed on February 21, 2001. All eight of the licenses auctioned were sold to three bidders. One of these bidders was a small business that won a total of two licenses.⁹⁹

⁹¹ Amendments to Parts 1, 2, 87 and 101 of the Commission's Rules To License Fixed Services at 24 GHz, *Report and Order*, 15 FCC Rcd 16934, 16967 ¶ 77 (2000) (*24 GHz Report and Order*); see also 47 C.F.R. § 101.538(a)(2).

⁹² *24 GHz Report and Order*, 15 FCC Rcd at 16967 ¶ 77; see also 47 C.F.R. § 101.538(a)(1).

⁹³ See Letter to Margaret W. Wiener, Deputy Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Commission, from Gary M. Jackson, Assistant Administrator, Small Business Administration, dated July 28, 2000.

⁹⁴ See Service Rules for the 746-764 MHz Bands, and Revisions to Part 27 of the Commission's Rules, *Second Report and Order*, 15 FCC Rcd 5299 (2000).

⁹⁵ *Id.* at 5343 ¶ 108.

⁹⁶ *Id.*

⁹⁷ *Id.* at 5343 ¶ 108 n.246 (for the 746-764 MHz and 776-794 MHz bands, the Commission is exempt from 15 U.S.C. § 632, which requires Federal agencies to obtain Small Business Administration approval before adopting small business size standards).

⁹⁸ See "700 MHz Guard Bands Auction Closes: Winning Bidders Announced," *Public Notice*, 15 FCC Rcd 18026 (2000).

⁹⁹ See "700 MHz Guard Bands Auction Closes: Winning Bidders Announced," *Public Notice*, 16 FCC Rcd 4590 (WTB 2001).

34. **Multipoint Distribution Service, Multichannel Multipoint Distribution Service, and Instructional Television Fixed Service.** Multichannel Multipoint Distribution Service (MMDS) systems, often referred to as “wireless cable,” transmit video programming to subscribers using the microwave frequencies of the Multipoint Distribution Service (MDS) and Instructional Television Fixed Service (ITFS).¹⁰⁰ In connection with the 1996 MDS auction, the Commission defined “small business” as an entity that, together with its affiliates, has average gross annual revenues that are not more than \$40 million for the preceding three calendar years.¹⁰¹ The SBA has approved of this standard.¹⁰² The MDS auction resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs).¹⁰³ Of the 67 auction winners, 61 claimed status as a small business. At this time, we estimate that of the 61 small business MDS auction winners, 48 remain small business licensees. In addition to the 48 small businesses that hold BTA authorizations, there are approximately 392 incumbent MDS licensees that have gross revenues that are not more than \$40 million and are thus considered small entities.¹⁰⁴

35. In addition, the SBA has developed a small business size standard for Cable and Other Program Distribution,¹⁰⁵ which includes all such companies generating \$12.5 million or less in annual receipts.¹⁰⁶ According to Census Bureau data for 1997, there were a total of 1,311 firms in this category, total, that had operated for the entire year.¹⁰⁷ Of this total, 1,180 firms had annual receipts of under \$10 million, and an additional 52 firms had receipts of \$10 million or more but less than \$25 million.¹⁰⁸ Consequently, we estimate that the majority of providers in this service category are small businesses that may be affected by the rules and policies proposed in the Further Notice.

¹⁰⁰ Amendment of Parts 21 and 74 of the Commission’s Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Report and Order*, 10 FCC Rcd 9589, 9593 ¶ 7 (1995) (*MDS Auction R&O*).

¹⁰¹ 47 C.F.R. § 21.961(b)(1).

¹⁰² See Letter to Margaret Wiener, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, Federal Communications Bureau, from Gary Jackson, Assistant Administrator for Size Standards, Small Business Administration, dated March 20, 2003 (noting approval of \$40 million size standard for MDS auction).

¹⁰³ Basic Trading Areas (BTAs) were designed by Rand McNally and are the geographic areas by which MDS was auctioned and authorized. See *MDS Auction R&O*, 10 FCC Rcd at 9608 ¶ 34.

¹⁰⁴ 47 U.S.C. § 309(j). Hundreds of stations were licensed to incumbent MDS licensees prior to implementation of Section 309(j) of the Communications Act of 1934, 47 U.S.C. § 309(j). For these pre-auction licenses, the applicable standard is SBA’s small business size standard for “other telecommunications” (annual receipts of \$12.5 million or less). See 13 C.F.R. § 121.201, NAICS code 517910.

¹⁰⁵ 13 C.F.R. § 121.201, NAICS code 517510.

¹⁰⁶ *Id.*

¹⁰⁷ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, “Establishment and Firm Size (Including Legal Form of Organization),” Table 4 (issued October 2000).

¹⁰⁸ *Id.*

36. Finally, while SBA approval for a Commission-defined small business size standard applicable to ITFS is pending, educational institutions are included in this analysis as small entities.¹⁰⁹ There are currently 2,032 ITFS licensees, and all but 100 of these licenses are held by educational institutions. Thus, we tentatively conclude that at least 1,932 ITFS licensees are small businesses.

37. **Cable Television Relay Service.** This service includes transmitters generally used to relay cable programming within cable television system distribution systems. The SBA has defined a small business size standard for Cable and other Program Distribution, consisting of all such companies having annual receipts of no more than \$12.5 million.¹¹⁰ According to Census Bureau data for 1997, there were 1,311 firms in the industry category Cable and Other Program Distribution, total, that operated for the entire year.¹¹¹ Of this total, 1,180 firms had annual receipts of \$10 million or less, and an additional 52 firms had receipts of \$10 million or more but less than \$25 million.¹¹² Thus, under this standard, we estimate that the majority of providers in this service category are small businesses that may be affected by the rules and policies proposed in the Further Notice.

38. **Cable System Operators (Rate Regulation Standard).** The Commission has developed, with SBA approval, its own definition of a small cable system operator for purposes of rate regulation. Under the Commission's rules, a "small cable company" is one serving fewer than 400,000 subscribers nationwide.¹¹³ Based on our most recent information, we estimate that there were 1,439 cable operators that qualified as small cable companies at the end of 1995.¹¹⁴ Since then, some of those companies may have grown to serve over 400,000 subscribers, and others may have been involved in transactions that caused them to be combined with other cable operators. The Commission's rules define a "small system," for purposes of rate regulation, as a cable system with 15,000 or fewer subscribers.¹¹⁵ The Commission does not request nor does the Commission collect information concerning cable systems serving 15,000 or fewer subscribers, and thus is unable to estimate, at this time, the number of small cable systems nationwide.

39. **Cable System Operators (Telecom Act Standard).** The Communications Act, as amended, also contains a size standard for a small cable system operator, which is "a cable operator that, directly or through an affiliate, serves in the aggregate fewer than 1 percent of all subscribers in the United States and is not affiliated with any entity or entities whose gross annual revenues in the aggregate

¹⁰⁹ In addition, the term "small entity" under SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. §§ 601(4)-(6). We do not collect annual revenue data on ITFS licensees.

¹¹⁰ 13 C.F.R. § 121.201, NAICS code 517510.

¹¹¹ U.S. Census Bureau, 1997 Economic Census, Subject Series: Information, "Establishment and Firm Size (Including Legal Form of Organization)," Table 4 (issued October 2000).

¹¹² *Id.*

¹¹³ 47 C.F.R. § 76.901(e). The Commission developed this definition based on its determination that a small cable system operator is one with annual revenues of \$100 million or less. See Implementation of Sections of the Cable Television Consumer Protection and Competition Act of 1992: Rate Regulation, *Sixth Report and Order and Eleventh Order on Reconsideration*, 10 FCC Rcd 7393 (1995).

¹¹⁴ Paul Kagan Associates, Inc., *Cable TV Investor*, Feb. 29, 1996 (based on figures for Dec. 30, 1995).

¹¹⁵ 47 C.F.R. § 76.901(c).

exceed \$250,000,000.”¹¹⁶ The Commission has determined that there are 68,500,000 subscribers in the United States.¹¹⁷ Therefore, an operator serving fewer than 685,000 subscribers shall be deemed a small operator if its annual revenues, when combined with the total annual revenues of all of its affiliates, do not exceed \$250 million in the aggregate.¹¹⁸ Based on available data, we find that the number of cable operators serving 685,000 subscribers or less totals approximately 1,450.¹¹⁹ Although it seems certain that some of these cable system operators are affiliated with entities whose gross annual revenues exceed \$250,000,000, we are unable at this time to estimate with greater precision the number of cable system operators that would qualify as small cable operators under the definition in the Communications Act.

40. **Multichannel Video Distribution and Data Service.** MVDDS is a terrestrial fixed microwave service operating in the 12.2-12.7 GHz band. No auction has yet been held in this service, although an action has been scheduled for January 14, 2004.¹²⁰ Accordingly, there are no licensees in this service.

Private Wireless Radio Services

41. **Amateur Radio Service.** These licensees are believed to be individuals, and therefore are not small entities.

42. **Aviation and Marine Services.** Small businesses in the aviation and marine radio services use a very high frequency (VHF) marine or aircraft radio and, as appropriate, an emergency position-indicating radio beacon (and/or radar) or an emergency locator transmitter. The Commission has not developed a small business size standard specifically applicable to these small businesses. For purposes of this analysis, the Commission uses the SBA small business size standard for the category “Cellular and Other Telecommunications,” which is 1,500 or fewer employees.¹²¹ Most applicants for recreational licenses are individuals. Approximately 581,000 ship station licensees and 131,000 aircraft station licensees operate domestically and are not subject to the radio carriage requirements of any statute or treaty. For purposes of our evaluations in this analysis, we estimate that there are up to approximately 712,000 licensees that are small businesses (or individuals) under the SBA standard. In addition, between December 3, 1998 and December 14, 1998, the Commission held an auction of 42 VHF Public Coast licenses in the 157.1875-157.4500 MHz (ship transmit) and 161.775-162.0125 MHz (coast transmit) bands. For purposes of the auction, the Commission defined a “small” business as an entity that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$15 million dollars. In addition, a “very small” business is one that, together with controlling interests and affiliates, has average gross revenues for the preceding three years not to exceed \$3 million

¹¹⁶ 47 U.S.C. § 623(m)(2).

¹¹⁷ Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming, 17 FCC Rcd 1255 (2001) (*Eighth Annual Report*).

¹¹⁸ 47 C.F.R. § 76.1403(b).

¹¹⁹ Paul Kagan Associates, Inc., *Cable TV Investor*, Feb. 29, 1996 (based on figures for Dec. 30, 1995).

¹²⁰ “Auctions of Licenses in the Multichannel Video Distribution and Data Service Rescheduled for January 14, 2004,” *Public Notice*, DA 03-2354 (August 28, 2003).

¹²¹ 13 CFR § 121.201, NAICS code 517212 (2002).

dollars.¹²² There are approximately 10,672 licensees in the Marine Coast Service, and the Commission estimates that almost all of them qualify as "small" businesses under the above special small business size standards.

43. **Personal Radio Services.** Personal radio services provide short-range, low power radio for personal communications, radio signaling, and business communications not provided for in other services. The Personal Radio Services include spectrum licensed under Part 95 of our rules.¹²³ These services include Citizen Band Radio Service (CB), General Mobile Radio Service (GMRS), Radio Control Radio Service (R/C), Family Radio Service (FRS), Wireless Medical Telemetry Service (WMTS), Medical Implant Communications Service (MICS), Low Power Radio Service (LPRS), and Multi-Use Radio Service (MURS).¹²⁴ There are a variety of methods used to license the spectrum in these rule parts, from licensing by rule, to conditioning operation on successful completion of a required test, to site-based licensing, to geographic area licensing. Under the RFA, the Commission is required to make a determination of which small entities are directly affected by the rules being adopted. Since all such entities are wireless, we apply the definition of cellular and other wireless telecommunications, pursuant to which a small entity is defined as employing 1,500 or fewer persons.¹²⁵ Many of the licensees in these services are individuals, and thus are not small entities. In addition, due to the mostly unlicensed and shared nature of the spectrum utilized in many of these services, the Commission lacks direct information upon which to base an estimation of the number of small entities under an SBA definition that might be directly affected by the proposed rules.

44. Despite the paucity, or in some instances, total absence, of information about their status as licensees or regulatees or the number of operators in each such service, users of spectrum in these services are listed here as a matter of Commission discretion in order to fulfill the mandate imposed on the Commission by the Regulatory Flexibility Act to regulate small business entities with an understanding towards preventing the possible differential and adverse impact of the Commission's rules on smaller entities. Further, the listing of such entities, despite their indeterminate status, should provide them with fair and adequate notice of the possible impact of the proposals contained in the Further Notice.

45. **Public Safety Radio Services.** Public Safety radio services include police, fire, local government, forestry conservation, highway maintenance, and emergency medical services.¹²⁶ There are

¹²² Amendment of the Commission's Rules Concerning Maritime Communications, *Third Report and Order and Memorandum Opinion and Order*, 13 FCC Rcd 19853 (1998).

¹²³ 47 C.F.R. Part 90.

¹²⁴ The Citizens Band Radio Service, General Mobile Radio Service, Radio Control Radio Service, Family Radio Service, Wireless Medical Telemetry Service, Medical Implant Communications Service, Low Power Radio Service, and Multi-Use Radio Service are governed by Subpart D, Subpart A, Subpart C, Subpart B, Subpart H, Subpart I, Subpart G, and Subpart J, respectively, of Part 95 of the Commission's rules. See generally 47 C.F.R. Part 95.

¹²⁵ 13 C.F.R. § 121.201, NAICS Code 517212.

¹²⁶ With the exception of the special emergency service, these services are governed by Subpart B of part 90 of the Commission's Rules, 47 C.F.R. §§ 90.15-90.27. The police service includes approximately 27,000 licensees that serve state, county, and municipal enforcement through telephony (voice), telegraphy (code) and teletype and facsimile (printed material). The fire radio service includes approximately 23,000 licensees comprised of private volunteer or professional fire companies as well as units under governmental control. The local government service that is presently comprised of approximately 41,000 licensees that are state, county, or municipal entities that use the radio for official purposes not covered by other public safety services. There are (continued....)

a total of approximately 127,540 licensees in these services. Governmental entities¹²⁷ as well as private businesses comprise the licensees for these services. All governmental entities with populations of less than 50,000 fall within the definition of a small entity.¹²⁸

Satellite-Related Services

46. **Fixed Satellite Transmit/Receive Earth Stations.** The most recent Commission data shows that there are approximately 3,149 earth station authorizations,¹²⁹ a portion of which are Fixed Satellite Transmit/Receive Earth Stations. We do not request nor collect annual revenue information from these licensees, and are unable to estimate the number of earth station licensees that are small business entities under SBA definitions.

47. **Fixed Satellite Small Transmit/Receive Earth Stations.** The most recent Commission data shows that there are approximately 3,149 earth station authorizations,¹³⁰ a portion of which are Fixed Satellite Small Transmit/Receive Earth Stations. We do not request nor collect annual revenue information from these licensees, and are unable to estimate the number of fixed satellite small transmit/receive earth station licensees that are small business entities under SBA definitions.

48. **Fixed Satellite Very Small Aperture Terminal (VSAT) Systems (14 GHz).** These stations operate on a primary basis, and frequency coordination with terrestrial microwave systems is not required. Thus, a single "blanket" application may be filed for a specified number of small antennas and one or more hub stations. The most recent Commission data shows that there are 485 current VSAT System authorizations.¹³¹ We do not request nor collect annual revenue information from these licensees, and are unable to estimate the number of VSAT system licensees are small business entities under SBA definitions.

49. **Mobile Satellite Earth Stations.** The most recent Commission data shows that there are 21 licensees.¹³² We do not request nor collect annual revenue information from these licensees, and are

approximately 7,000 licensees within the forestry service which is comprised of licensees from state departments of conservation and private forest organizations who set up communications networks among fire lookout towers and ground crews. The approximately 9,000 state and local governments are licensed to highway maintenance service provide emergency and routine communications to aid other public safety services to keep main roads safe for vehicular traffic. The approximately 1,000 licensees in the Emergency Medical Radio Service (EMRS) use the 39 channels allocated to this service for emergency medical service communications related to the delivery of emergency medical treatment. 47 C.F.R. §§ 90.15-90.27. The approximately 20,000 licensees in the special emergency service include medical services, rescue organizations, veterinarians, handicapped persons, disaster relief organizations, school buses, beach patrols, establishments in isolated areas, communications standby facilities, and emergency repair of public communications facilities. 47 C.F.R. §§ 90.33-90.55.

¹²⁷ 47 C.F.R. § 1.1162.

¹²⁸ 5 U.S.C. § 601(5).

¹²⁹ Assessment and Collection of Regulatory Fees for Fiscal Year 2003, *Report and Order*, FCC 03-184, Attachment A ¶ 29 (rel. July 25, 2003).

¹³⁰ *Id.* at ¶ 30.

¹³¹ *Id.* at ¶ 31.

¹³² *Id.* at ¶ 32.

unable to estimate the number of mobile satellite earth station licensees that are small business entities under SBA definitions.

50. **Radio Determination Satellite Earth Stations.** The most recent Commission data shows that there are four licensees.¹³³ We do not request nor collect annual revenue information, and are unable to estimate the number of radio determination satellite earth station licensees that are small business entities under SBA definitions.

51. **Space Stations (Geostationary).** The most recent Commission data shows that there currently are an estimated 75 U.S.-licensed Geostationary Space Station authorizations.¹³⁴ We do not request nor collect annual revenue information from these licensees, and are unable to estimate the number of geostationary space station licensees that are small business entities under SBA definitions.

52. **Space Stations (Non-Geostationary).** The most recent Commission data shows that there currently are seven Non-Geostationary Space Station licensees.¹³⁵ We do not request nor collect annual revenue information from these licensees, and are unable to estimate the number of non-geostationary space station licensees that are small business entities under SBA definitions.

53. **Direct Broadcast Satellites.** Because DBS provides subscription services, DBS falls within the SBA-recognized definition of "Cable and Other Program Distribution."¹³⁶ This definition provides that a small entity is one with \$12.5 million or less in annual receipts.¹³⁷ Currently, there are three U.S.-licensed DBS licensees.¹³⁸ We do not request nor collect annual revenue information for DBS services, and are unable to determine the number of DBS operators that would constitute a small business entity under SBA definitions.

54. **Digital Audio Radio Services (DARS).** Commission records show that there are two Digital Audio Radio Services licensees.¹³⁹ We do not request nor collect annual revenue information from these licensees, and are unable to estimate the number of DARS licensees that are small business entities under SBA definitions.

D. Description of Projected Reporting, Recordkeeping and Other Compliance Requirements

55. The policies and proposals in the Further Notice could apply to a significant number of Commission licensees and spectrum lessees in a range of wireless services. The Further Notice explores possible steps to allow certain spectrum leasing arrangements, and possibly license assignments and

¹³³ *Id.* at ¶ 33.

¹³⁴ *Id.* at ¶ 34.

¹³⁵ *Id.* at ¶ 35.

¹³⁶ 13 CFR § 121.201, NAICS code 517510.

¹³⁷ *Id.*

¹³⁸ Assessment and Collection of Regulatory Fees for Fiscal Year 2003, *Report and Order*, FCC 03-184, Attachment A ¶ 36 (rel. July 25, 2003).

¹³⁹ See Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process, 18 FCC Rcd 11664, 11712 (Appendix A) (2003).

transfers of control, to be implemented without prior individualized Commission approval, using forms similar to those used at present for obtaining prior Commission approval of these types of transactions. At most, the Further Notice proposals would shift the timing of filing of forms for certain of the transactions. In addition, the Further Notice inquires about extending to additional services the spectrum leasing procedures adopted in the Report and Order for spectrum manager leasing arrangements and *de facto* transfer leasing arrangements. Licensees otherwise would have to obtain prior Commission consent to transfers of control or license assignments on similar forms.

56. Consideration of extending the spectrum leasing policies adopted in the Report and Order to additional services specified in the Further Notice implicates potential reporting, recordkeeping and compliance requirements for licensees and spectrum lessees in these additional services, including: (1) retention of lease agreements; (2) reporting of spectrum leasing terms to the Commission; (3) licensee and lessee compliance with the Commission's technical and service rules; (4) licensee filings with the Commission on behalf of the lessee; (5) licensee verification of lessee compliance with Commission rules; (6) licensee supervision of a lessee's adherence to the Commission's rules and policies; and (7) the leasing of spectrum by entities designated as "small business" or "very small business" under the Commission's rules. Licensees and lessees may retain or hire outside professionals (*e.g.*, legal and engineering staff) to draft lease agreements, provide consulting services, maintain records, and comply with applicable Commission rules. They also may employ existing or new employees to be responsible for reporting, recordkeeping, and other compliance requirements.

57. The Further Notice also explores what steps the Commission should take, possibly including additional information submissions, to promote effective functioning of secondary markets in spectrum usage rights. The Further Notice does not, however, propose any specific reporting, recordkeeping or compliance requirements in this regard. We seek comment on what, if any, requirements we should impose if we adopt the proposals set forth in the Further Notice.

E. Steps Taken to Minimize Significant Economic Impact on Small Entities, and Significant Alternatives Considered

58. The RFA requires an agency to describe any significant, specifically small business, alternatives that it has considered in reaching its proposed approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance or reporting requirements under the rule for small entities; (3) the use of performance, rather than design, standards; and (4) an exemption from coverage of the rule, or any part thereof, for small entities."¹⁴⁰

59. Regarding our inquiry about how to facilitate increased access to spectrum usage information, *see* Further Notice, paras. 224-227, we do not anticipate any adverse impact on small entities. In fact, small (and large) entities should benefit by obtaining access to information that would enable their acquisition of spectrum that suits particular business needs. In addition, we note that we are encouraging parties to comment on whether we should develop an on-line information database, require more detailed operational information from licensees/lessees, create additional information services, encourage private sector collection and distribution of information, or allow independent third parties to act as "market makers." Although certain information collection requirements might impact entities, including small entities, due to increased reporting requirements, the Further Notice and this IRFA

¹⁴⁰ 5 U.S.C. §§ 603(c)(1)-(c)(4).

provide interested parties with an opportunity to comment on the possible burdens associated with each of the possible steps.

60. We also seek comment as to whether there are any additional steps that could be taken to further an efficient secondary marketplace through technological advances, opportunistic spectrum users, or other mechanisms (*e.g.*, spectrum managers). *See* Further Notice, paras. 233-235. We do not anticipate that any rules we decide to adopt in this area would adversely impact small entities. We believe that small (and large) entities will benefit from removing any unnecessary regulatory barriers to efficient spectrum usage.

61. Regarding our proposal to forbear from individual prior review and approval by the Commission for certain categories of leasing arrangements involving a transfer of *de facto* control, *see* Further Notice, paras. 244-277, we do not anticipate any adverse impact on small entities. In this connection, while we believe that lessening regulatory requirements would facilitate leasing arrangements entered into by all entities, including both small and large entities, we are mindful that forbearance must also be in the public interest. Consequently, we seek comment on various aspects of this proposal and specifically request commenters, including small entities, to comment on the eligibility criteria for forbearance set forth in the Further Notice. We realize that although some of the specific criteria could impact small entities, overall small entities should benefit from a more streamlined approach. Moreover, these specific criteria affect all entities, whether large or small entities. For example, lessees will need to comply with our foreign ownership restrictions before forbearance would apply. This requirement would be equitably applied to all entities seeking to obtain spectrum through a spectrum leasing arrangement. Moreover, even where possible spectrum lessees may not take advantage of entering into spectrum leasing arrangements without individualized prior Commission approval, such entities (again, whether large or small entities) would be able to seek approval by means of our prior approval procedures for spectrum leasing arrangements.

62. Similarly, regarding our possible forbearance from individual prior review and approval by the Commission for transfer and assignment transactions, *see* Further Notice, paras. 278-287, it seems unlikely that small entities would suffer any adverse impact. Nonetheless, we seek comment on the various eligibility criteria that might be employed and, in particular, we encourage small entities to comment on the impact that our unjust enrichment and installment payment policies might have on this proposal.

63. Regarding the possibility extension of the spectrum leasing policies adopted in the Report and Order to a number of excluded wireless services, *see* Further Notice, paras. 289-314, we anticipate generally that there would be no adverse impact on small entities. Because there are substantial numbers of small entities in all the wireless services, small entities could be significantly affected by our extension of leasing policies to the wireless services excluded by the Report and Order. We believe, however, that these small entities would likely benefit from the increased flexibility that leasing arrangements will offer in meeting their particular spectrum needs.

64. Regarding the possibility of extending our decision to streamline the application processing for transfer and assignment applications to other wireless services, *see* Further Notice, para. 314, we anticipate no adverse impact to small entities. The information that would be collected under a more streamlined approach is similar to what is currently required under our transfer and assignment rules and should facilitate spectrum leasing by reducing transaction costs, uncertainty, and delay. While an

alternative would be to require no approval, we believe that this would run counter to our statutory responsibilities under Section 310(d) of the Communications Act.¹⁴¹

65. Regarding our analysis of the question of whether to apply our new *de facto* control standard to regulatory contexts other than leasing, *see* Further Notice, paras. 316-318, we cannot determine at this time what the impact on small entities might be. Should we move away from the facilities-based approach of our *Intermountain Microwave* standard, it may be presumed that small entities would have more flexibility to enter into certain types of management agreements. On the other hand, such an approach might not be warranted in connection with our designated entity and entrepreneur eligibility rules and policies. We thus encourage small entities to comment on the various issues raised in the Further Notice regarding an appropriate standard for defining *de facto* control.

66. Finally, regarding our inquiry into whether the restrictions adopted for designated entity leasing should be altered, *see* Further Notice, para. 323, we believe that small entities would likely benefit from the removal of certain restrictions. But as noted above, there is a balance of competing considerations taking place here. We hope that small entities in particular will comment on what approach best promotes an efficient secondary spectrum market, provides benefits to small entities, and considers our statutory and public interest obligations.

F. Federal Rules That May Duplicate, Overlap, or Conflict with the Proposed Rules

67. None.

68. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Further Notice of Proposed Rule Making, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

¹⁴¹ 47 U.S.C. § 310(d).

**JOINT STATEMENT OF
CHAIRMAN MICHAEL K. POWELL and COMMISSIONER KEVIN J. MARTIN**

Re: Promoting Efficient Use of the Spectrum Through Elimination of Barriers to the Development of Secondary Markets; Report and Order and Further Notice of Proposed Rulemaking; WT Docket No. 00-230

Today's action is one of the most important spectrum reform decisions by this Commission in the last decade. For years, the Commission has rhetorically praised the concept and possibilities created by secondary markets in spectrum. Today that rhetoric turns into reality. Our decision unlocks value trapped for too many years in a regulatory box. That box was most clearly epitomized by the anachronistic 40-year old *Intermountain Microwave* standard, which required Commission prior approval for a license transfer any time a licensee ceded any of a panoply of responsibilities associated with equipment, salaries, personnel and sundry other activities. We are pleased to announce the passing of *Intermountain*, as we explicitly abandon that standard for spectrum leases. Built on the 2000 *Spectrum Policy Statement* as refined and developed by this Commission, today we adopt a new standard more narrowly tailored to the statutory requirements and more suited to today's marketplace. Our decision signals a new day of increased spectrum access and improved services for consumers.

In this item, we adopt a new regime for spectrum leases, allowing leases for which there is no change in de facto control to proceed without prior Commission approval and providing a streamlined approval process for other leases. We also adopt a streamlined approval process for transfers and assignments of licenses. Together, the rules we adopt will create new opportunities for licensees with under-utilized spectrum, to the benefit of consumers. A carrier with a business plan that calls for serving only the most densely populated portions of its service area now has every incentive to lease the balance of their spectrum to an entrepreneur. Similarly, the cost-benefit equation for spectrum sharing has been transformed. Where formerly the risk of interference imposed only costs, those costs must now be weighed against the value that may be negotiated in a lease or transfer. When cognitive radios and frequency-agile technologies are introduced to the mix, the opportunities multiply.

By increasing spectrum access, this item will advance a number of the Commission's key policy goals. Access to spectrum is critical to development of a wireless broadband platform. Moreover, ready access to spectrum promotes increased facilities-based competition among wireless service providers and between wireless providers and other platforms. And facilitating the ability to lease or transfer spectrum will expand spectrum access for innovators and entrepreneurs, increasing the number and variety of wireless applications available to consumers.

Additionally, this item offers the promise of greater wireless deployment in rural America. For example, a carrier with a nationwide license can, without significant transaction costs, lease or sell spectrum to rural carriers to build networks in rural areas. Rural carriers thus have the potential to obtain spectrum and build networks suited to their particular geography, while at the same time enabling the national carrier to develop partners to fill out its footprint. Spectrum leasing and transfers – along with partitioning and disaggregation – thus provides flexibility for the development of additional and innovative services in rural areas.

Whenever we change rules that have been in place for over forty years there will be trepidation about the outcome. We are indeed entering a new world of spectrum flexibility with a reduced role for government. That role, however, remains significant. Our order builds in some important safeguards to protect the public interest. Within such protections, we owe it to the public to modernize and streamline our rules. We should not be deterred from our obligation to continually seek better policies for the American people.

Our *Further Notice* seeks to develop a record on expanding to other services the sound policies set out in the Order and to further streamline our policy approach. We also seek comment on facilitating spectrum exchanges, maximizing the public benefits from new opportunistic devices, and extending the new de facto control standard. We look forward to developing a record on these issues – and continuing this important work.

SEPARATE STATEMENT OF
COMMISSIONER KATHLEEN Q. ABERNATHY

Re: *Promoting Efficient Use of Spectrum through Elimination of Barriers to the Development of Secondary Markets, Report and Order and Further Notice of Proposed Rulemaking, WT Docket No. 00-230*

Effective FCC management of the spectrum resource is critical because it is a finite natural resource with immense potential value to the American people. As I have previously stated, the goal of the FCC should be to create regulatory policies that foster effective investment and stimulate the delivery of services to the American people. If private parties don't invest, any theoretical spectrum policy is meaningless because the Commission must rely on the private sector to make it all happen.

There are many pieces of the puzzle that must be in place for the Commission to have a market-driven spectrum policy that encourages investment. One of the most important pieces and one that I have consistently supported is the creation of secondary markets for spectrum. We must have an effective and legally defensible secondary market if the property-like rights driven license model for spectrum-based services is to succeed.

When licensing spectrum-based services, parties are provided with a grant to specific spectrum rights. At times, however, the licensee may not be able to utilize the entire grant. Our challenge has been to harness that untapped resource. As a result of today's decision, incumbents will be able to sell the additional rights, thus allowing to evolving to its higher-valued use.

I believe that adoption of today's Report and Order shepherds in a monumental shift in spectrum policy in the United States. This item recognizes the importance of creating a market-based approach to regulation by creating a secondary market for spectrum in the wireless radio services. In doing so, it substantially updates the FCC's standard for interpreting Section 310(d) of the Communications Act set forth in the 1963 *Intermountain Microwave*¹ decision for purposes of spectrum leasing. The Commission has broad authority to interpret the requirements of the Communications Act and has significant discretion to revise existing policies, doing so benefits the public interest and is consistent with our statutory authority.² The very changed nature of the wireless industry, coupled with the advances made in improving FCC spectrum policies and the need for more market-based forms of regulations, provide support for a change in the interpretation of Section 310(d) by the Commission. The new standard enables parties to enter into leasing transactions that are not deemed transfers of de facto control under Section 310(d) so long as the licensee continues to exercise effective working control over the spectrum while ensuring that the lessor and lessee comply with Commission requirements.

I have no doubt that our efforts today to create a secondary market for spectrum for wireless radio services will lead to increased efficiency in the use of the spectrum, and will result in greater consumer benefits, including the provision of new and innovative services to consumers. In addition, the Further NPRM we are adopting will provide the Commission with additional public input so that we can continue

¹ *Intermountain Microwave*, 12 FCC 2d 559 (1963).

² See, e.g., *Telephone and Data Systems, Inc. v. FCC*, 19 F.3d 42, 49 (D.C. Cir. 1994); *Federal National Association for Better Broadcasting v. FCC*, 849 F.2d 665, 669 (D.C. Cir. 1988); *Telecommunications Research and Action Center v. FCC*, 800 F.2d 1181 (D.C. Cir. 1986).

to refine our secondary markets rules and policies. Over time, I am hopeful that the approach we are adopting today will serve as a model for other countries that are moving forward with creating increasingly vibrant and competitive regulatory environments for wireless services.

**DISSENTING STATEMENT OF
COMMISSIONER MICHAEL J. COPPS**

RE: *Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Development of Secondary Markets; Report and Order and Further Notice of Proposed Rulemaking (WT Docket No. 00-230).*

Developing a secondary market in spectrum holds great promise. It could lead to more efficient spectrum allocation, more intense use of rural spectrum that currently lies fallow, and, with new technologies like software designed radio, it could assist in bringing innovative spectrum uses to the public.

From a policy perspective, I could support many of the ideas in today's Order. I am encouraged that the Order concerns only a subset of our licensees. Generally we limit our actions to commercial telecommunications providers that paid for their spectrum licenses at auction. Allowing leasing by companies that have already compensated the public for the use of spectrum is both significantly different and far more defensible than allowing companies that were given their spectrum rights for free to lease it and reap windfall profits. Second, we would require all *de facto* leases to be reviewed by the Commission before being approved. Third, we would only allow spectrum-manager-type leasing where the lessor is held liable for the actions of the lessee. We make it clear that lessors are responsible if their lessees violate Commission rules. Because of these important protections, I could support many of the policy ideas contained in this Order.

But I keep running into the same problem and I cannot make it go away. I do not see how the law allows us to effectuate these policies. I must therefore respectfully dissent. Congress enacted Section 310(d) of the Communications Act and we must abide by it. That section makes it clear that no "station license or any rights thereunder shall be transferred, assigned or disposed of in any manner . . . except upon application to the Commission and upon finding by the Commission that the public interest, convenience, and necessity will be served thereby." But today we allow licensees to transfer a significant right – the right to control the spectrum on a day-to-day basis – without applying to the Commission and without the requirement of any Commission public interest finding. How can this be legal under Section 310(d)?

The majority believes that that when Congress said licensees can not transfer "any rights" under a license that they did somehow not mean this phrase to include the right to control all use of the spectrum on a day-to-day basis. This is not my reading of the statute. If "any rights" does not include the right to exclusive use of the spectrum on a day-to-day basis, what can it mean? The majority apparently believes that it means only those rights that are needed to "exercise effective working control" of the spectrum. But if this were true, why did Congress use such sweeping language? It could have limited Section 310(d) only to preclude transfers of a more limited set of powers. Instead it chose to include "any rights" under the license. The Order's interpretation conflicts with the plain language of the statute and effectively reads the "any rights thereunder" language completely out of the statute, preferring to treat the provision as if Congress had only limited transfers of "all rights" under a license.

The majority notes that taking the "any rights thereunder" language seriously would endanger previous Commission decisions allowing spectrum managers, ITFS leasing, and other types of leasing. If this is true, then given the plain language of the statute, we have even more incentive to look for Congressional clarification. Finally, the majority argues that a plain language reading of the statute proves too much, asserting that if the statute precludes leasing of complete day-to-day control of a license that it would also preclude a CMRS provider from allowing a customer to place a phone call over its

system. But this approach misses, I believe, an important distinction between these two extremes. A customer of a CMRS provider placing a call has no rights to control the spectrum when placing a call – the CMRS provider maintains all rights to the spectrum, including the right to monitor the call, to cut it off, or to assign it to one channel or another. Just as a restaurateur does not transfer any rights to control his restaurant to a patron who comes in for lunch, a CMRS provider does not transfer any rights to control its spectrum to a caller on its system. But if the restaurateur leases his building to another company, or if a licensee leases day-to-day control of his license to another company, a transfer of rights to control has occurred.

Because Section 310(d) does not allow transfers without FCC approval, I remain of the opinion that the Commission, if we wish to go down this road, will have to go the Congress and seek legislative changes before proceeding with the sweeping changes it would make today. Any other approach puts us in conflict with the law. Seeking legislative change can be frustrating and time consuming; I know that as well as anybody here. But the Commission simply cannot overstep its authority and exchange its policy preferences for those imposed by statute. Yet that is exactly what today's Order does.

Finally, I want to thank my colleagues for agreeing to eliminate several sections of the NPRM. I appreciate their willingness to accommodate Commissioner Adelstein's and my concerns. Beginning the process of allowing television and radio broadcasters to sell to non-broadcasters access to spectrum rights that Congress and the FCC gave them for free would have been a terrible mistake. It would have meant that broadcasters could sell control of part or all of their spectrum rights to others, potentially without Commission review. Broadcasters were given these spectrum rights for free because they are engaged in work that is critically important to our country – the provision of free over-the-air TV and radio. To allow them to sell these spectrum rights for other uses would have been deeply troubling. And by doing so we may have undermined the digital transition by giving broadcasters an incentive to hang on to control as much spectrum as they can for as long as they can with the hope of leasing it for profit.

Similarly, proposing to do away with traditional FCC review of transfers of control of all licenses, including broadcast licenses, would have been a mistake. It would have meant that the FCC would no longer need actually to conduct a review of mergers and acquisitions involving FCC licenses. It would merely require companies to file applications and then hold that transfers would be deemed granted unless the Commission acted within 21 days. So while we are considering eliminating our media consolidation rules on one hand, claiming that case-by-case review will pick up the slack, we would have been proposing to vastly cut back on even case-by-case review.

I also support the decision to eliminate a proposal to drop our policies designed to promote opportunities for small businesses to participate in spectrum-based services. We would have erred in abandoning the designated entity and entrepreneur policies without proposing replacing them with anything more than our general secondary markets policy. A hope that secondary markets will guarantee small and rural businesses access to spectrum is still untested. Congress has specifically instructed us to protect access by small and rural companies, and we must not take this instruction lightly.

I appreciate eliminating the section that would have proposed allowing licensees to mortgage their licenses as a way to raise money. After NextWave, we are right to be particularly cautious before allowing our licenses to become entangled in such arrangements. And given that the law instructs us that we may not grant licensees ownership rights in spectrum that is owned by the public, I believe we would have been on shaky ground.

Finally, as I understood it as late as this morning, the NPRM still proposes to apply our new and more liberal *de facto* transfer of control standard to questions of foreign ownership. This, too, troubles

me and could well set us on a collision course with the Section 310 mandate that the Commission review foreign ownership of U.S. licenses.

Thank you.

SEPARATE STATEMENT OF
COMMISSIONER JONATHAN S. ADELSTEIN

Re: Promoting Efficient Use of Spectrum through Elimination of Barriers to the Development of Secondary Market; WT Docket No. 00-230

Our approach to secondary markets requires an important balance. The Commission should encourage healthy and robust secondary markets. At the same time, we must ensure that license obligations continue to be satisfied and enforced. A regulatory framework for innovation should promote a secondary market that accommodates new technologies, but does not cause the Commission to lose or cede ultimate control over the spectrum.

I believe that today's Order accomplishes that delicate balance. By replacing the current facilities-based *Intermountain Microwave* standard with a new more flexible standard for determining *de facto* control, we take a significant step toward the creation of healthy and robust secondary markets, while also ensuring that license obligations required under our rules continue to be satisfied and enforced.

The development of secondary markets promises many benefits to the nation. A robust secondary market will increase access to spectrum, and will promote the development of new and innovative services for all Americans. I believe that it plays an important role in enabling the electromagnetic spectrum, a finite public resource, to be used more effectively and efficiently.

I am particularly hopeful that the development of secondary markets will increase access to spectrum in rural areas. I have heard time-and-time-again that the Commission's policies to improve access to spectrum have fallen short of our goal of providing service to rural and other underserved areas. Today, we remove significant regulatory obstacles and provide a framework for allowing licensees to lease more easily unused spectrum to entities that will use it. In doing so, we move closer to achieving our goal of ensuring that all areas of the nation receive the full benefits of advanced wireless services.

I also believe that increased access to spectrum can lead to increased opportunities for innovation in spectrum services and increased opportunities for new entrants who have developed the latest technologies.

When making decisions, such as those we do today, the Commission always must consider whether they are consistent with the applicable statute. We then must determine whether our decisions are in the public interest. This is an important two-pronged review. The analysis contained in the Order confirms that our actions are consistent with Section 310(d) of the Communications Act. And I believe that the public interest dictates that we utilize the available spectrum to the best of our ability.

However, in making this determination, we also must carefully balance the advantage of a higher valued use of the spectrum with the potential challenges we face when we allow licensees the freedom we grant them today. For the greater good, I choose to embrace the possibilities that our decision envisions and deal separately with the potential pitfalls. This is where our enforcement capacity becomes so very important.

While I am optimistic about our decision today, I must highlight my belief that the Commission's enforcement authority is critical to ensuring that this new regulatory environment is a success. We must make sure that not only the entities using spectrum are in compliance with our rules, but also that the Commission is capable and fully willing to enforce those rules. This enforcement authority, I believe, is particularly critical to instill confidence in the secondary markets. This is even more important when

spectrum will be leased frequently and will be used for a wide variety of purposes and by a wide variety of entities.

Finally, I do have concerns with our request for comment on allowing public safety licensees to potentially lease out their spectrum. I am unsure whether such flexibility would be in the public interest, but I believe that developing the record on this issue is appropriate to enable us to fully analyze the issues involved. I encourage all interested parties to fully comment on this portion of the Further Notice.

I have similar concerns about our request for comment on possible forbearance with respect to certain transfers and assignments. I am not convinced that there is such a problem with our current transfer and assignment rules and procedures that would warrant a determination to forbear from requiring prior approval for certain transfers and assignments. More importantly, I think such a proposal may raise statutory concerns, and I look forward to reviewing the record on all aspects of the issue.

I do, however, appreciate the cooperation of my colleagues in making other changes to the Further Notice that allow me to fully support the item before us.

I support the development of secondary markets, and I support this Order. I look forward to working on the issues raised in the Further Notice to ensure that we achieve successful secondary markets and the full utilization of the nation's radio spectrum consistent with a framework for innovation. I also will continue to be mindful of the Commission's important role in managing our nation's spectrum, and the important role enforcement will play in ensuring a vibrant and stable secondary market.